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## Evaluating the objective structured long examination record for nurse education

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## **Key phrases**

1. Holistic assessment of clinical skills should be part of the undergraduate nursing curriculum.
2. The OSLER, in conjunction with the OSCE, guarantees the assessment of not only clinical competence but also care for the patient as a whole.
3. The OSLER may help students appreciate the need to focus on developing their communications skills during their undergraduate nursing programme.
4. The OSLER can be applied to all fields of nursing and assess both the generic and field specific competences for pre-registration nursing education.

## **INTRODUCTION**

### **Assessing Clinical Skills**

Every graduating nursing student in the UK must possess a broad basic level of competence to meet the requirements for registration with the Nursing and Midwifery Council (NMC). The assessment of clinical competence is therefore of significant importance, as decisions on whether a student can ultimately register with the NMC are directly linked to demonstrating the requisite competence. Clinical assessment of what a nursing student can do typically includes observation of the student by the mentor whilst they are carrying out specific tasks to demonstrate specific skills, for example wound dressing or the administration of medicines.

### **Long-case versus short-case examinations**

Methods for clinical assessment include the long- and short-case examinations (Gleeson, 1997). Currently, the common method for the assessment of clinical skills in health related disciplines is a type of short-case examination, the Objective Structured Clinical Examination (OSCE), which was first developed in Scotland (Harden et al, 1975) and is now a well-recognised method for assessing clinical reasoning skills. The OSCE consists of a number of short tasks, known as stations. Every station lasts a specified length of time, usually five minutes, and candidates do each one in turn. First employed by medical schools, the

OSCEs have become increasingly used by schools of Nursing in the UK (Traynor and Galanouli, 2015; Liddle, 2014) and more widely in Europe (Mårtensson and Löfmark, 2013), the USA (Beckham, 2013; Corcoran et al, 2013; McWilliam and Botwinski, 2012; Cazzell and Rodriguez, 2011) and also Australia (Henderson et al, 2013; Nulty et al, 2011).

The OSCE, whilst very successful in assessing individual components of clinical competence, does not conventionally enable assessment of the student's care for the patient as a whole. This aspect of assessment is a specific feature of the long-case examination. This one hour assessment begins with candidates taking a patient's history and performing a physical examination without an examiner present. The next stage involves the student being examined for 20 to 30 minutes. This type of examination is very important as it assesses the complete candidate/patient interaction in a manner similar to that which happens in the practice of medicine in real life. However, concerns over the validity and reliability of the long-case examination have historically hindered its use (Michael et al, 2013). Thornton, for example, reports in his review of the long case approach that its perceived low reliability has caused this form of assessment to be largely discontinued in North America and also in many UK medical schools (2012) while efforts to modify and improve the long-case examination were recorded in South America (Troncon et al, 2000). As a consequence, for some (for example as reported in a Psychiatry context by Burn and Brittlebank, 2013) the more viable alternative is for a modified, longer OSCE to be designed to replace the long-case. In response to this, the Objective Structured Long Case Examination Record (OSLER) was developed (Gleeson, 1997; Boursicot et al, 2007).

Gleeson describes the OSLER as 'a 10-item analytical record [...] which attempts as far as is possible within the limits of practicality to improve the objectivity, validity and reliability of existing practices' (Gleeson, 1997, p 4). These ten items (See Appendix 1) include four items on history, three on physical examination, and three on management and clinical acumen. For any individual item, examiners decide on their overall grade for the candidate

and then discuss this with their co-examiner and agree on a joint grade. This is completed for each item and also for the overall and final agreed mark (Boursicot et al, 2007). The OSLER guarantees that the same aspects of the competence are examined by all examiners, helping to ensure consistency and thus promoting better standardisation of the long case (Thornton, 2012).

In a review of the literature on the long case, Ponnampuruma and colleagues (2009) found the main advantage of the OSLER to be its ability to assess the candidate's overall (holistic) approach to the patient whilst Thornton (2012) refers to its authenticity in doctor-patient interaction compared to the OSCE. It is this ability to assess the holistic approach that also makes it a suitable assessment tool for nursing.

## Background

The impetus for change to the current clinical assessment format arose from the new NMC Preregistration Standards for Nurse Education, which required generic competencies and field specific competencies to be included in all curricula. These separate sets of competencies for each of the four fields of adult nursing, mental health nursing, learning disabilities nursing and children's nursing are organised in four domains, namely professional values; communication and interpersonal skills; nursing practice and decision making; leadership, management and team working (NMC 2010).

The aim of the current study was to evaluate a new approach to the assessment of Year 2 clinical competencies from the student perspective, using a third year nursing group who had previous experience of the year 2 material and of both, year 1 and year 2 OSCE. It was hypothesised that an OSLER is a more relevant type of assessment than the OSCE for second year nursing students, as it is case based, it places more emphasis on communication and interpretation of clinical symptoms and reflects the Enquiry Based Learning (EBL) strategy, all of which are inherent to many nurse curricula.

It was also important to have an assessment tool that would:

- (a) test the students' ability to cope with the more complex nursing problems congruent with the NMC progression points for year 2;
- (b) include nursing problems associated with mental health and learning disability nursing; and
- (c) supplement the assessment carried out by the mentor.

In addition to the above, the research objectives of the study included probing the students' views on clinical skills assessment practices; their views of the OSCE and their views of the OSLER. It should be noted here that, unlike the medical OSLERs where real patients were involved, the study reported here featured simulated patients and manikins in the long cases.

## METHODS

A survey approach was adopted combining both quantitative and qualitative elements to enhance understanding of the students' perspective on the OSCE, the OSLER and also the assessment of clinical skills in nursing. The sample was selected from a third year nursing cohort as these students had the experience of both a Year 1 and a Year 2 OSCE and therefore were considered to be better positioned to compare the proposed assessment tool OSLER with a previous examination by OSCE.

The participants were asked to complete the pre-session questionnaire to ascertain their previous experience of clinical assessment. They then completed the OSLER, which involved three standardised stations under examination conditions. Each station lasted 20 minutes resulting in a total time of 60 minutes under examination. A post-session questionnaire was then administered.

Based on the competencies for year 2, a three station OSLER was designed.

The OSLER reflected real case scenarios adapted to the year 2 curriculum content. The scenario scripts included a detailed description of the patient with actual medical and nursing problems, instructions for the student and detailed information for the simulated patient and the examiner. The order of the stations and an example of one station are provided in Appendix 2. To complement the student evaluations, teachers (n=4) and simulated patients (n=3) were also evaluated.

The pilot study was conducted according to the ethical guidelines of the University and was approved by the School's Research Ethics Committee.

### The Instruments

Two 21-item questionnaires were devised for this study (one for pre-assessment and one for post-assessment). The items focused on specific themes previously identified from the literature (Major, 2005; Miller, 1990; Harden and Gleeson, 1979; Rushforth, 2007; Boursicot et al, 2007). These themes included assessment of clinical skills; OSCE as an assessment tool; and finally OSLER as an assessment tool.

## RESULTS

### Respondents' profile

From a cohort of 230 students a total of 21 volunteered to participate in the study. The largest proportion of participants were from the adult branch (n=18) with two from Mental Health and one from Learning Disability. The gender breakdown was 16 female (F) and five male (M). Six students were 28 years old or over and the majority were in the 22-27 years age range (n=10).

Data were collected, analysed and presented under three key areas in line with the research objectives of the study: assessment of clinical skills, the OSCE as an assessment method and the OSLER as an assessment method.

### Students' Views on the Assessment of Clinical Skills

Both the pre- and post- test questionnaires aimed to probe *inter alia* the students' views regarding the assessment of clinical skills in general and more specifically how they perceived their own clinical assessment skills:

#### **-Table 1-**

As Table 1 illustrates, all 21 students recognised the importance of good clinical assessment skills for every healthcare professional. The large majority (n=18) would welcome increased skills' assessment in their undergraduate training and believed that clinical skills assessment could be improved in the undergraduate curriculum (n=19).

The importance of clinical skills practice and the need for more continuous skills assessment are also reflected in the qualitative comments of the students:

*'I feel I personally only looked at developing my clinical skills around my OSCE time. Therefore I feel it would be beneficial to spread clinical skills testing out continuously over the two/three years, rather than focusing on them once a year.'*

F, 22-27 years old, Adult

As to where clinical skills should be assessed, almost half of the respondents (n=10) disagreed that the clinical area is the only place where skills should be assessed. The idea that clinical assessment should not be restricted to the clinical area was also supported in the qualitative statements:

*"I think assessment in the Skills Centre is better than in a clinical area as it is more of a 'level playing field'. Hospital wards are unpredictable environments and having assessments there may give some students an unfair advantage, for example if they have had a good experience on the ward and are well liked".*

M, 33-39 years old, Mental Health

The students' comments suggest that nursing students find clinical skills practice central to their studies and they are keen to experience more clinical skills assessment during their training in a variety of settings.

### Students' Views on the OSCE as an Assessment Method

Students were generally positive about the OSCE as an assessment method, with just over half of the sample (n=11) agreeing that they found it to be a good way to assess clinical skills in the undergraduate curriculum. As table 2 indicates, all of the students agreed that the OSCE improved their understanding of the need to be competent in clinical skills:

#### **-Table 2-**

Students' comments highlight the importance of OSCE-type clinical skills assessment; for example:

*'The OSCEs make sure you are performing each clinical skill to the expected level. It gives you a good indication of how competent you are with each skill and highlights areas for improvement.'*

F, 22-27 years old, Adult

Participants were asked about the stress associated with the OSCE and the overall benefit of it. Sixteen students agreed that the OSCE was stressful but also beneficial. This was also borne out by a number of the qualitative statements:

*'They are stressful but once you pass them you feel a sense of achievement and it helps build character. They also build relationships with peers as we all went through it together.'*

F, 28-32 years old, Adult

Several participants mentioned the unrealistic nature of the OSCE as one of its disadvantages, but generally admitted that, despite its artificial nature, it is necessary as not all skills can be practised in a clinical setting:

*'It's an un-natural experience.'*  
F, 33-39 years old, Adult



*‘Very stressful and somewhat false setting that makes it feel unrealistic but I understand it is not possible to assess all skills on real people.’*

*Female, 22-27 years old, Adult*

### Students’ Views of the OSLER as an Assessment Method

Participants in this study were positive about the OSLER examination, with 18 out of 20 students agreeing that it was a good assessment method (one student did not offer their views on the OSLER). Clearly such a small sample does not allow for generalisations but the consensus among the respondents seems to have been positive:

*“The real life approach was extremely comforting. The feeling that I am not ticking boxes to gain marks made it a less stressful situation.”*

*M, 22-27 year old, Adult*

*“I don’t think the OSLER is a panacea but it could address some of the current concerns about a ‘crisis in patient care’. I also think there is scope for scenarios including ‘difficult’ patients or relatives or for assessments for mental health and learning disability.”*

*M, 33-39 year old, Mental Health*

Respondents were also positive about the setting where the OSLER assessment took place, with 13 agreeing or strongly agreeing that the simulated environment of the OSLER was a good replication of the clinical area. The authenticity of the clinical area was further endorsed by 16 of the respondents who indicated that the case scenarios used in the OSLER were realistic. This, however, was in contrast to some of the open comments responses:

*‘Second station was not enjoyable because cleaning round a wound on a mannequin and not being able to communicate was hard... Overall a worthwhile study. Could*

*be made more realistic regarding the patient. Include more real people and communicate with examiner.'*

Female, 18-21 year old, Adult

The descriptive data on the OSLER are summarised in the table 3:

**-Table 3-**

Seventeen students agreed that the OSLER would ensure that students focus more on practising their skills while on placement and there was also agreement that the OSLER should be adopted as an assessment method in the undergraduate curriculum. It is notable that just over half of the participants (n=14) found the case scenarios used in the OSLER to be clinically challenging with all of them indicating it highlighted the importance of good communication skills to clinical practice. The OSLER was considered to be an effective way to assess communication skills (n=17) and this featured prominently in the participants' comments:

*"I think it is just like OSCE's but longer. I think it will still be very stressful for students however clinical skills need to be assessed and I like how it focuses on communication."*

F, 18-21 year old, Adult

*"I think the combination of OSCEs and OSLERs would be valuable in assessing both the clinical skills and the ability to communicate with patients and relatives in a professional manner."*

F, 22-27 year old, Adult

With the NMC placing communication skills at the top of their competency framework, second only to professional values (NMC, 2010), it is not surprising that students are eager to ensure they are given the opportunity to develop and practise their communication skills to the maximum during their undergraduate degree.

When asked directly about the suitability of the OSLER for the undergraduate nursing programme, 17 agreed that the OSLER should be adopted as an assessment method in the undergraduate curriculum. The majority of participants (n=19) were convinced of the value of the OSLER to year 2 of the programme but fewer were positive about its usage in year 1 (n=12), arguing that the OSLER would be of more benefit to the advanced stages of the undergraduate curriculum, one respondent stated:

*'I think OSLERs would be really useful especially in years 2 and 3 – an OSCE would be more appropriate for first year because you haven't developed your skills as much.'*

F, 22-27 year old, Adult

### Teachers' and Simulated Patients' Views of the OSLER as an Assessment Method

In general, the teachers found the OSLER examination an efficient way of examining students' clinical skills and a more realistic and holistic clinical assessment for year 2 students:

*'Very useful way of evaluating students overall skills incorporating clinical skills with knowledge. Get to see these skills in an examination setting as it would be very difficult to ensure equity amongst students if evaluation takes place in clinical areas.'*

Teacher 1

The simulated patients also found the process efficient and informative:

*'[The OSLERs] give students the opportunity to interact with real people in an exam setting. Get to see how a student treats the person as a whole -for want of a better word- their bedside manner.'*

Simulated Patient 2

On the other hand, the disadvantages of the OSLER included the use of manikins instead of real/simulated patients, the perceived lack of time for consultation when two examiners were involved and the challenge of ensuring clear information is given to every student:

*'Can be very false. Students do not react [...] verbally to 'dummies' how they would with real patients. Students get very nervous when being watched and can score badly compared to how they would usually act in clinical work. Opposite also true, students can 'act' and score very well in OSLER's but this may not reflect how they would actually behave in real situation.*

Teacher 1

## DISCUSSION

The aim of the undergraduate nursing curriculum is to develop competent professional nurses who are eligible to register with the NMC. The educational programme should enable the developing student to assess and plan care and ultimately to provide essential nursing care. Assessments during training therefore seek to determine whether the student is developing the appropriate levels of competency.

The OSCE is designed to test this clinical competence in practical skills and corresponds to the "Shows how" level of Miller's Pyramid of Knowledge (Miller 1990), the other levels being 'Knows', 'Knows how' and 'Does'. It belongs to the 'Behavioural' levels as described by Sim and colleagues in their study of clinical skills assessment and specifically the assessment of clinical reasoning skills for medical students (2015).

### **- Figure 1 -**

However, a major criticism is that it examines isolated skills or components, which are appropriate at the beginning of a nursing programme to assess essential skills, but as the

learner progresses the learning objectives are more complex and integrated into all aspects of nursing care. Van der Vleuten and Schuwirth (2005) argue that for this level of competence the traditional OSCE risks fragmentation and trivialisation of what should be a coherent whole. In contrast the OSLER is designed to assess the student in a more holistic manner and suggests that the OSLER can be a suitable assessment method for undergraduate nursing after the first year.

The literature references to stress associated with OSCEs (e.g. McKnight et al. 1987; Bujack et al. 1991; Stroud et al. 1999; Bartfay et al. 2004; Cazzell and Rodriguez 2011; Mårtensson and Löfmark 2013) was confirmed in this study but students also agreed that it was a good experience. This is an interesting finding and is perhaps explained by the fact that most previous studies cite students on the OSCE being a stressful experience immediately post examination whilst the respondents in this study had much more time to reflect on the use of OSCEs since their first and/or second years of study. Their response is perhaps more measured in terms of the benefit of this type of examination to the assessment of clinical competence.

The study additionally indicates very promising outcomes in terms of the OSCE and OSLER as means of helping students to work better to improve their clinical skills. OSLERs in particular have the potential to encourage students to actively seek opportunities to practise clinical skills and improve their performance. The benefit of the OSLER as a means of assessing communications skills was also evident from this study in contrast to the OSCE, which arguably does not give sufficient attention to the interpersonal skills including communication (Hodges 2003; McGrath et al. 2006). Nursing practice is complex and has many different competency components. Communication skills for example are essential for safe practice and a five or ten minute OSCE may not provide sufficient time to adequately assess the range of behaviours within the concept of communication. Therefore the assessment of complex and predominantly subjective constructs such as communication

skills can be subject to low validity and poor inter-rater reliability within an OSCE and it is argued that these are therefore more suited to assessment via an OSLEP where these aspects are better addressed.

There are other advantages to using the OSLEP, including a high level of objectivity with students facing the same predefined assessment in a standardised scenario, having the same time limit, and being evaluated on a standardised check list (Appendix 1). Duglade (1996) and Wass and Jolly (2001) have argued that the OSLEP has greater validity than the standard long case in that it provides a real time, actual patient problem, which must be approached holistically. The primary implication of the study is that OSLEPs may also be applied to all fields and stages of nurse education for assessing generic and field specific competencies as determined by the NMC in the recent standards for pre-registration education (NMC, 2010).

### Study limitations

This study has several limitations. It was conducted within a single institution utilising a convenience sample of final year nursing students. The sample size (n=21) was relatively small. The study would need to be replicated on a wider scale in order to validate the findings.

## CONCLUSION

This study offers very encouraging evidence to support the use of an OSLEP as an adjunct to clinical assessment within an undergraduate nursing curriculum. Competency based assessment is a requirement of the NMC and research must continue into this important area to ensure that we adopt the most suitable approach to assessing clinical competence.

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